

Attorney Docket No.: J3711(C)  
Serial No.: 10/775,510  
Filed: February 10, 2004  
Confirmation No.: 1049

**REMARKS**

Claim 1 has been amended to specify that  $R^4$  represents diphenylethyl,  $R^C$  represents a residue of  $\alpha$ -methylstyrene dimer, benzyl alcohol or allyloxy ethanol, and  $R^A$  represents a methyl group; with this amendment, the requirement that at least 60% of the carbon atoms in total in  $R^4$ ,  $R^C$  and  $R^A$  has been deleted. Claim 1 has been further amended to specify that thickener, gellant or structurant is a required component of the claimed composition and to specify a minimum amount thereof. See, for example, the specification at page 10, lines 3 to 6. Claim 2 has been cancelled without prejudice. Claim 4 has been amended to specify that  $R^C$  is the residue of  $\alpha$ -methylstyrene dimer.

Entry of these amendments is respectfully requested.

In view of the foregoing amendments, Applicants request reconsideration of the provisional obviousness-type double patenting rejection over later filed US Serial No.11/316,596 (filed December 21, 2005 and under rejection). Additionally, Applicants respectfully submit that this rejection is premature and, in any event, would more properly be made in the later filed application. Upon the indication of otherwise allowable subject matter, the claims can be compared and the need for a terminal disclaimer reassessed; at such time, should the form of the claims be such that such a rejection is proper, Applicants reserve the right to file an appropriate terminal disclaimer.

Claims 1, 2, 4, 6-8, 12, 18-20, 22 and 23 stand rejected under 35USC 103(a) as unpatentable over McGlone et al. (US 6,503,492) in view of Powel et al. (WO 00/27348); Claims 16 and 24 stand rejected as unpatentable over McGlone and

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Powell et al., and further in view of Chuah et al. (WO 03/005977). These rejections are respectfully traversed.

As amended, claim 1 is directed to anhydrous antiperspirant compositions that comprise a particulate aluminium and/or aluminium/zirconium antiperspirant active; a water-immiscible carrier fluid and, a thickener, gellant or structurant for the carrier fluid, all in amounts as therein more particularly described, the carrier fluid comprising an aryl substituted siloxane which is required to contain a very high proportion of diphenylethyl groups. As previously noted, not only do these substituted siloxanes have a very high refractive index, e.g., 1.54 to 1.58, pursuant to the subject invention it was found that the siloxanes can be used to provide compositions that offer significant processing advantages such as, for example, comparatively low solidification temperatures and a wide processing temperature window.

Table 3 of the subject application provides gelling temperature data for compositions that included a diphenylethyl substituted siloxane, capped or uncapped (NS124, NS053, NS078, NS065 and NS068), an  $\alpha$ -methylstyrene substituted siloxane that lacks the claimed diphenylethyl substituents (NS070 or NS050) or DC704 alkylphenyl siloxane (CS1) from Dow Corning. Some of the compositions included isostearyl alcohol (ISA) and aspartame ester gellant (G2), other compositions included ISA and N-lauroyl-L-glutamic acid di-n-butylamide gellant (G3). The G2- and G3-containing ISA based systems which contained the **diphenylethyl substituted siloxanes** (NS124, NS053, NS078, NS065 or NS068) had significantly lower gelling temperatures than otherwise identical compositions that contained NS070, NS050 or DC704. Table 4 provides pour temperature data for compositions that contained G2, G3, ISA, particulate antiperspirant active, and a

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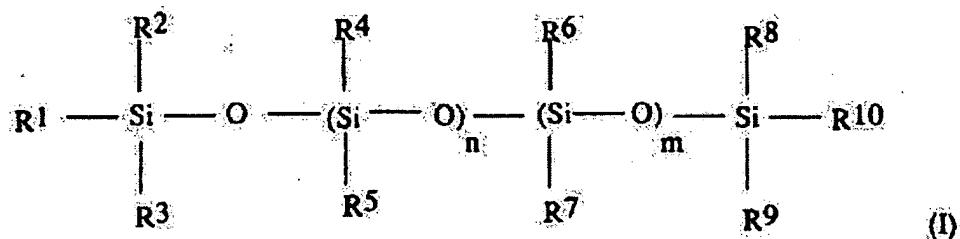
selected siloxane, i.e., the diphenylethyl substituted siloxanes NS053, NS065, NS068, the  $\alpha$ -methylstyrene substituted siloxane NS070 or DC704 alkylphenylsiloxane. The compositions with the claimed diphenylethyl substituted siloxane had pour temperatures ranging from 65 to 69°C, compared to a pour temperature of 87°C for the composition which contained NS070 and a pour temperature of 85°C for the composition which contained DC704.

Reduced processing temperatures can translate to significant energy savings in the manufacture of antiperspirant compositions, (e.g., antiperspirant sticks). Reduced processing temperatures can mean that lower temperatures may be employed in filling product into a dispensing pack and/or in other parts of production operations. Since the extent and rate of cooling are generally increased as fill temperatures are raised, lowering the fill temperature of a product can also reduce the energy required for cooling. In short, in a production context, reduced processing temperatures can translate to both less energy to heat as well as less energy to cool.

As set forth in Applicants' prior Amendment, McGlone et al. is directed to antiperspirant compositions that incorporate a cannabanoid receptor activating agent. The patent discloses that the compositions may include a non-volatile emollient that may consist of a single emollient compound or a mixture of emollients. Identified as typical of such emollients are saturated fatty acids and fatty alcohol esters, ethers containing aliphatic and a polyalkylene group, hydrocarbons, water insoluble ethers, mineral oils and polyorganosiloxanes, and mixtures thereof. There is nothing in the patent that discloses the diphenylethyl substituted siloxanes of the subject claims.

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Powell et al. discloses personal care compositions that contain from 0.5 to 50 parts by weight of an aralkyl siloxane described by the formula:



as therein more particularly described. The generic formula reads on a great many siloxanes, including arylalkyl substituted siloxanes. As noted in the prior response, Powell et al. includes the following discussion of aryl and aralkyl groups:

As used herein, the term "aryl" means a monovalent unsaturated hydrocarbon ring system containing one or more aromatic rings per group, which may optionally be substituted on the one or more aromatic rings, preferably with one or more groups selected from amino, nitro, (C<sub>1</sub>-C<sub>6</sub>)alkyl, and which, in the case of two or more rings, may be fused rings, including, for example, phenyl, 2,4,6-trimethylphenyl, 2-isopropylmethylphenyl, 1-pentenyl, naphthyl, anthryl, preferably phenyl.

As used herein, the term "aralkyl" means an aryl derivative of an alkyl group, preferably a (C<sub>1</sub>-C<sub>6</sub>)alkyl group, wherein the alkyl portion of the aryl derivative may, optionally, be interrupted by an oxygen atom, such as, for example, phenylethyl, phenylpropyl, 2-(1-naphthyl)ethyl, preferably phenylpropyl, phenoxypropyl, biphenyloxypropyl.

In a highly preferred embodiment, the aralkylsiloxane comprises a compound according to formula (I), wherein R<sup>1</sup> and R<sup>10</sup> are each aralkyl, more preferably phenylpropyl, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>9</sup> are each (C<sub>1</sub>-C<sub>6</sub>)alkyl, more preferably methyl, n is 0 and 2 ≤ m ≤ 5, more preferably n is 0 and m is 3. In a very highly preferred embodiment, the aralkylsiloxane comprises α,ω-bis (2-phenylpropyl)siloxane.

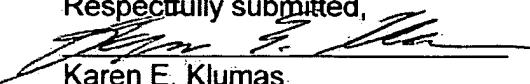
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There is nothing in Powell et al. that discloses or suggests the particular diphenylethyl substituted siloxanes set forth in the subject claims. Nor is there anything in the citation that discloses the incorporation of such diphenylethyl substituted siloxanes into antiperspirant compositions as herein described as a means of reducing the processing temperatures thereof. It is respectfully submitted that the subject data demonstrates that compared to compositions that include DC204, an aryl substituted siloxane, compositions that include the subject diphenylethyl substituted siloxanes can have significantly reduced processing temperatures, a result that Applicants submit is both surprising and unexpected. There is nothing in Chuah et al. that remedies these deficiencies. Chuah et al. is directed to an anhydrous antiperspirant formulation in the form of a soft solid. The soft solid of Chuah et al. comprises: a particulate antiperspirant salt, an anhydrous carrier fluid in an amount of from 50 to 85% by weight in which at least 70% by weight of the carrier fluid is selected from: branched fatty alcohols, aliphatic esters and aromatic esters and a structurant system comprising a dibenzylidene alditol and polymeric thickener. There is nothing in Chuah et al. that discloses or suggests compositions containing the high phenyl ethyl content siloxanes as described by the amended claims or the processing advantages afforded by same.

In light of the above amendments and remarks, reconsideration and allowance of the subject claims is respectfully requested.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,



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